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# Agricultural Experiment Station

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## THE FARM MACHINERY SITUATION

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In answer to the call for more food, the citizens of Illinois will plant every square foot of ground possible in 1918. To accomplish this end, farm machinery is a necessity, and it becomes a patriotic duty as never before to give attention to the early purchasing and care of implements. The United States Government has officially recognized the necessity of farm machinery by giving to the raw materials for its manufacture a rating in Class B1, next to the materials for munitions. It now devolves upon us to rise to the occasion and do our "best" to insure that we go into the fields this coming spring mechanically equipped for the great drive.

**An Adequate Supply of Machinery Is Necessary.**—The present labor shortage can be partially offset by an adequate supply of machinery to insure the proper planting, cultivating and harvesting of a large crop. Stock should be taken of the machines on hand, keeping in mind the labor conditions and the crops which should be planted. If there is any possible doubt of a sufficient supply being on hand, take a trip to the dealers and order what may be necessary. Look over new machines, and see if there is not some new implement which could be used to advantage.

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**Order New Machines Now.**—If a new machine is needed, purchasing should not be put off until the season opens. *Order it now.* The best authorities agree that prices will not be lower. Transportation is very slow. The dealers, fearing retrenchment on the part of the users, are reluctant to lay in their usual supplies. The purchaser can render a patriotic service by placing his orders early, thereby taking advantage of present prices, relieving the dealer of unnecessary risks, giving the manufacturer an idea of the number of machines required, relieving the transportation situation later in the year, and insuring that the machines will be on hand when needed.

**Order Repairs Now.**—All machines on hand should be gone over and the repair parts which will be needed this next season listed. List not only broken parts and worn parts, but also parts which are known to wear out and break. Take this list to the dealer. If he has the parts on hand, take them home; if not, place an order immediately for the same. Express service can not be relied upon as in the past. Waiting to order until a machine breaks, may prove disastrous.

We should go into the field this coming spring prepared for emergencies. A machine with one part broken is useless. The ordering of repair parts now will insure an adequate supply in the hands of the user, thereby reducing to a minimum the time lost in breakdowns. The home army must be just as thoro and efficient in its work as the army on the firing line; it behooves us to be forehanded.

**Begin Now to Put the Machines in the Best Possible Working Condition.**—Under present conditions neglecting to care properly for farm machinery is certainly unpatriotic. Go over every implement, putting on repair parts, tightening the bolts, and replacing wooden parts which are worn out. Sharpen all soil-preparation machines, such as plows, disk harrows, and spike-toothed harrows. Give the cultivators an overhauling. Put the mowers and binders in repair. Clean out all the oil holes. Secure new bearings where they are needed. Have this work done on the farm or at the local blacksmith shop. The efficiency of farm machinery can be greatly increased for the coming season by careful attention to the above points. All this should be taken care of *before the spring work opens*. “Do it now” is the motto for repairing farm machinery.

**Care of Machinery.**—When using a tillage implement, make an especial effort to have the wearing surfaces scour, and then keep them in this condition. No such implement works properly when it

does not scour. This is especially true of soil-preparation implements and cultivators. When thru with one of these implements, coat the bright surfaces with axle grease or a mixture of axle grease and Venetian red.

It is a common saying that "machinery does not wear out; it rusts out"—a condition that can be largely prevented. Every implement should be housed if possible. Wherever stored, implements should be off the ground, away from contact with dirt, straw, manure, or trash. Keep the chickens away from them.

Go over every machine at the end of the season and list the repairs which it will require for another season on a tag attached to the machine. Then place an immediate order for any new parts which will be needed.

*It is imperative at the present time that every precaution possible be taken to lengthen the life of machinery. Raw materials are scarce, labor difficult to secure, and in addition to the domestic demands the American manufacturer must supply our allies with farm implements. In some lines, orders from England and France have increased 500 per cent since the war started. Here is an opportunity to render direct service! Care for the American machinery, thereby making available an adequate supply for our allies across the sea.*

**The Tractor.**—The gas tractor has arrived in the corn belt. In the hands of successful farmers it has proved to be a most desirable source of farm power. It works day and night, if necessary. It enables the farmer with a minimum of help to do a large amount of heavy work, such as the preparation of the soil, in a short time. It is not susceptible to the effects of flies and hot weather. Where winter wheat is grown, it has proved to be a desirable source of power, as it permits the proper preparation of a seed bed when plowing is difficult and the soil hard to work.

To insure more efficient use of the tractor this coming season, especial attention should be given to two things: First, take steps to put the tractor in the best possible condition now; and second, learn as much as possible about the fundamentals of tractor operation.

The tractor requires more attention than any other machine which the farmer owns. Do not expect it to work without this attention. Before spring work opens, every tractor should be gone over by an ex-



pert. If the operator understands his machine thoroly, he is the man to do the work. If not, try to secure a local mechanic who is to be trusted, or obtain the services of a representative from the company which manufactured the machine.

The fundamental principles upon which a tractor operates are new to most of us. This fact has led to an endless amount of trouble, which can be remedied only when each and every one who operates a tractor makes a special effort to become thoroly familiar with the fundamentals of cycles, ignition, carburization, etc. There is available much literature on these subjects. Books and newspaper and magazine articles furnish a wealth of information. Read carefully the instruction book which should be furnished with every tractor; if it has been lost, secure another. If possible, attend one of the tractor schools which will be conducted this winter. Leave nothing undone that will fit you to become a more proficient tractor operator.

**Service from the Dealer and the Manufacturer.**—Some dealers and most manufacturing companies maintain a corps of experts whose services are available to farmers whose machines are not working properly. Before calling for such services, be certain that the trouble cannot be remedied by a local mechanic. If it cannot, put in a request, thru the dealer, for help from the company. If a machine gave trouble last season, put in such a request now, thereby giving the manufacturers an opportunity to become familiar with the trouble and to plan for taking care of it before the rush season opens.

*Thus, we must take better care of our machinery. We must anticipate our needs. We must use our machinery more efficiently, reducing in every way possible the man labor required for producing maximum crops.*

*To put the production and use of machinery on a war footing requires co-operation and forethought on the part of manufacturers, dealers and farmers. Ordinary methods of doing business in this field are not sufficient to meet the demands of a nation at war.*